

Abstract

A predistortion linearizer, transmitter and method for linearizing a nonlinear device (e.g., power amplifier, mixer) are described. The predistortion linearizer includes a coupling circuit, a diode and a direct current adjusting circuit that work together to generate a distorted signal which is reflected onto a signal path and inputted into the nonlinear device. The distorted signal compensates for at least some of the nonlinear spurs introduced by the nonlinear device to an input signal which was also applied to the signal path and inputted into the nonlinear device. As a result, the nonlinear device outputs a compensated output signal.